

### REMARKS

Reconsideration of the instant application is respectfully requested. The present amendment is responsive to the Final Office Action of November 6, 2003, and submitted concurrently with a Request for Continued Examination (RCE), in which claims 1-31 are presently pending. Of those, claims 1-5, 7-11, 13-17, 19-23 and 25-30 have been rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent 5,114,240 to Mehdizadch, et al. In addition, the remaining claims 6, 12, 18, 24 and 31 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Mehdizadch, in view of U.S. Patent 6,522,140 to Harvey. For the following reasons, however, it is respectfully submitted that the application is now in condition for allowance.

Independent claims 1, 7, 13, 19 and 25 have been amended to include the term "at a single frequency" in conjunction with a plurality of resonance modes. Support for this amendment may be found at least in paragraph [0029] of the specification:

"As a receiver, however, the birdcage further uses both the homogeneous and the inhomogeneous modes, all of which are detected *at the same frequency*." (emphasis added)

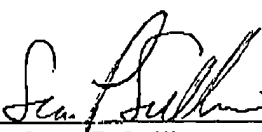
In the Final Office Action, the Examiner indicates (in response to the amendment dated August 26, 2003) that the claims do not recite "single frequency modes". As now amended, however, the claims more particularly point out the fact that the degenerate birdcage resonator, in conjunction with output circuitry, receive emitted RF energy at a plurality of resonance modes at a single frequency of the degenerate birdcage coil. As was stated previously, Mehdizadeh does not teach receiving multiple modes of a single frequency, but rather two separate frequencies. More specifically, Mehdizadch describes that "[t]he recombined and phase shifted signals are supplied to a receiving means 30 including a 26 MHz receiver 30a and a 64 MHz receiver 30b." (col. 4, lines 9-12)

Thus, one skilled in the art will recognize that a receiver configured for detecting two or more frequencies is not the same as detecting multiple resonance modes at a single frequency. Accordingly, since Mehdizadeh does not teach each and every element of the independent claims, as well as the claims dependent therefrom, there is no anticipation of the claims by that reference. Furthermore, because neither Mehdizadeh nor any of the other cited references teach using a degenerate birdcage (i.e., a single resonator with equally spaced rungs) for multiple resonance mode detection, it is respectfully requested that both the §102 and §103 rejections have been overcome.

For the above stated reasons, it is respectfully submitted that the present application is now in condition for allowance. No new matter has been entered and no additional fees are believed to be required. However, if any fees are due with respect to this Amendment, please charge them to Deposit Account No. 07-0845 maintained by Applicants' attorneys.

Respectfully submitted,

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